

# Transylvania University of Brasov, Romania

## Study program: Kinetic therapy and Special Motricity

Faculty: Physical Education and Mountain Sports

Study period: 3 years (bachelor)

### 1<sup>st</sup> Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Anatomy and Biomechanics	Anat01	3	2	1	-	

**Course description (Syllabus):** Anatomy - Generalities. Osteology. Joint system. Myology. Getting elementere on the cardiovascular and respiratory systems. Basics of biomechanics.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Kinesiology	Kine01	3	2	1	-	-

**Course description (Syllabus):** Movement - moving concept, importance and its place in human motility; Human motor skills - concept, structure, capacity motor and psychomotor concept; Causes and effects of motility - physiological mechanisms, motility and adaptation; Characteristics and laws of human motion - facts and laws determinants of body movement; Motility - phylogenetic and ontogenetic approach; Learning movements and motor activity; Capabilities moving - exercise.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Practical application in mountainous environment	SpSchi01	3	-	-	-	3

**Course description (Syllabus):** Use of mechanical means specific to winter sports, Knowledge of Code of Conduct and Compliance with Sliding Rules on the Path, Knowing how to transport the equipment while traveling, Grip and loosening of the boots, Preparing the body for effort, Accommodation with the equipment, Falling and getting out of the fall, Basic Technique - Walks, ascents, returns - Direction changes on the spot, Basic Technique- Ski positions - Direct descent, Stopping technique- Snow plough stop and snow plough glide, Oblique descent, Crossing slope breaks, Basic technique – Garlands, The simple garland, Ghirland with simultaneous opening of the skis, Cristie with rotation, Cristie with counterweight.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Psychopedagogy	Phys01	2	1	1	-	-

**Course description (Syllabus):** Mental processes involved in sport - general characterization; The role of cognitive processes (thinking, imagination) in sport; The role of regulatory processes in sport (affectivity, motivation, the will); Personality factors and their influence on sport activities; Total athletic performance and training; Competence profile of the coach / teacher of physical education and sport; The Group's sports and leadership

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English / Spanish	LE01/02	2	1	1	-	-
	LS01/02	2	1	1	-	-

**Course description (Syllabus):** The Verb. Mood, tense and aspect; The Verb. Indicative Mood. Present (simple & continuous, perfect simple & continuous); The Verb. Indicative Mood. Past (simple & continuous, perfect simple & continuous); The Verb. Indicative Mood. Future (simple & continuous, perfect simple & continuous). Future-in-the-Past (simple & continuous, perfect simple & continuous). Other ways of expressing the future (Present simple & continuous, be going to, be to, be about to); The Verb. Modals; The Adjective. Classification, comparison, special constructions, position

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
General foundations of athletics	Patl01	5	2	2	-	-

**Course description (Syllabus):** Prophylactic and therapeutic importance of athletics; Lesson athletics - general concepts; Fundamentals art samples running, jumping and throwing; Learning methodology samples athletic equipment: school runners; Learning methodology samples athletic equipment: jump school; Learning methodology samples athletic equipment: throwing school; Prevention and correction of physical deficiencies through athletic exercises adapted.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Academic writing	Sac.01	1	1	-	-	-

**Course description (Syllabus):** Career and Learning: Drafting supporting documents (letter of intent, research project, curriculum vitae) Sources in academic writing: WATER citation Systems, Chicago/Tarubian, MLA. Notes, bibliography Types of Academic Products: Argumentative essay: The structure of the argumentative essay. The internal structure of the paragraphs and the link between them.

Types of Academic Products: research paper: General principles of a research work. Choice of subject. Identification of sources. Bibliographical research. The work plan and the system of fiches.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
The scientific basis of the handball game	FHdb01	5	2	2	-	-

**Course description (Syllabus):** Technical handball game (attack, defense, goalkeeper) basic position of attack and defense, movement in court, Keeping, catching and passing the ball, dribbling the ball, throwing the gate, Feinting game, removing the ball from the opponent, blocking opponent's body, goalkeepers equipment; Handball tactics (definition, purpose, classification, principles, individual tactical attack, players tasks positions); Collective attack tactics (principles, means simple and basic combinations) Phases attack, attack forms, game systems in attack; Defense: individual and collective tactics, principles, means, stages and forms of defense; Teaching on educational handball. Preparing school representative team.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
The scientific basis of the fotball game	Ffotb.01	5	2	2	-	-

**Course description (Syllabus):** The game of football - the description and content; Technical football; Specific technical elements of football; Tactics of football - general. Game system; Tactics individual and collective in attack and defense.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Semiologie	Sem01	2	1	1	-	-

**Course description (Syllabus):** General concepts of semiology; The semiology of the subcutaneous tissue; The semiologia of the muscle tissue; The Semiologia of the locomotor system; The semiologia of blood vessels; The semiologia of skin, respiratory, cardiovascular

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Basic gymnastics	Gimn.02	5	2	2	-	-

**Course description (Syllabus):** The importance of prophylactic and therapeutic gymnastics; Body and segmental dynamics reflected in the terminology of gymnastics; Specific means of basic gymnastics - exercises organization, general physical development, corrective exercises and exercises applied to specific devices; General Bases of corrective gymnastics; General training bases correct attitude of the body; Measures to prevent physical deficiencies; Ways of developing modern gym lessons and maintenance. The terminology used in their design aerobics maintenance. Process characteristics for maintaining health, aging theories on the causes and factors favoring; Basic principles of planning gymnastics; Measures on practicing physical exercises at different age groups; Arrangements for program development and maintenance of modern gymnastics.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Initiation practice in swimming	Swim02	2	-	3	-	-

**Course description (Syllabus):** Introduction to swimming technique; Technique and teaching methodology in crawl process - free; Technique and teaching methodology in backstroke process; Breaststroke technique and methodology of teaching process; Applications of various techniques in preventing certain diseases.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physiology	Fiz.02	3	2	1		

**Course description (Syllabus):** Musculoskeletal: bone physiology; musculoskeletal physiology; Nervous system: general concepts, brainstem physiology ; physiology of the cerebral hemispheres; physiology of the autonomic nervous system - the sympathetic and parasympathetic; Endocrine system; Respiratory system; Cardiovascular system: heart physiology; circulation physiology; physiology circulation , lymphatic circulation physiology ; Nerve regulation of blood circulation; Metabolism physiology

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Health education and first aid	ESan 02	5	2	2	-	-

**Course description (Syllabus):** Food hygiene. Healthy human nutritional needs. Athlete's rational nutrition. Athlete individual hygiene. Hygiene problems in performance sports. Injuries (bruises, wounds, sprains, fractures, hemorrhages). Cardio-respiratory stop.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
The scientific basis of the basket game	Bas.02	5	2	2	-	-

**Course description (Syllabus):** The theoretical aspects of the technical and tactical basketball game; Concepts of game and instruction. The main basketball to persons with disabilities. The method of teaching basketball to persons with disabilities. Concepts of instruction and game of school teams; development of the motile qualities specific basketball to persons with disabilities. Organizing basketball competitions, basketball to persons with disabilities; The main methodical lines in teaching the basic elements g the basketball game basketball to persons with disabilities; Technical elements and processes with and without the ball. The main methodical lines in teaching individual tactics in defense and offense, elementary tactical combinations in defense and offense. The main methodical lines in teaching collective tactics in defense and offense. Planning documents in basketball, evaluating the children's knowledge. Referees in basketball. Commenting the basketball to persons with disabilities.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
The scientific basis of the volley game	Vol02	5	2	2	-	-

**Course description (Syllabus):** History volleyball game; Overview of the volleyball game; Technical volleyball game; The away game of volleyball. Tactics to the service; Tactics of attack; Teaching activities in volleyball physical therapist intervention.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Secondary and tertiary kinetoprophylaxis	Kprof02	3	2	1	-	-

**Course description (Syllabus):** Physical deconditioning syndrome, definition, generalities; The consequences of physical deconditioning syndrome neuromioartrokinetic system; The consequences of physical deconditioning syndrome on the cardiovascular system; Physical deconditioning syndrome consequences on the respiratory system; Body balance, definition components. Balance testing; . Recovering balance disorders; walk-definition, time of travel, kinetic implications.

## 2<sup>nd</sup> Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Scientific research methods	MCŞ03	3	1	1	-	-

**Course description (Syllabus):** Science, science corporal activities, scientific research - subject-specific concepts "research methodology" Research Methods; Methods of investigation: observation, investigation, experiment etc. Methods of analysis and interpretation: statistical method; Measurement and testing in physical education and sports activities; Writing research papers; Aspects style of writing in a research paper

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Theory and methodical of physical education and sport	TMEFS03	3	2	1	-	-

**Course description (Syllabus):** Theory of Physical Education and Sport (TEFS) - scientific discipline; Principal terms of the Theory of Physical Education and Sport (human movement, physical education, sport, sports training, physical development, motor ability, physical attributes, skills and exercise); The effort lesson e.f.s; The organization forms of practicing physical exercises (lesson e.f.s. - basic form of practicing physical exercises - taxonomy, content, structures, forms of organization, arrangement and practice of collective of students in the lesson e.f.s.);

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Theory and practice in swimming and hydro-kinesitherapy	TPHid03	7	2	2	1	-

**Course description (Syllabus):** Hydrokinetotherapy - General remarks. Aquatic gymnastics and its role in the recovery. The influence of swimming on health. Therapeutic indications and contraindications for swimming. Hydrokinetotherapy in physical deficiencies of the back.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
General bases of kinetotherapy	BGK03	5	2	2	-	-

**Course description (Syllabus):** General and specific objectives in Physical Therapy. Specific and nonspecific means of physical therapy. Joint balance - general remarks. Neuroproprioceptiv facilitation techniques. Methods in Physical Therapy.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Communication in PE / Ethics and professional deontology	Com/Etk 03	3	1	2	-	-

**Course description (Syllabus):** Communication - characteristics, Non-verbal communication; Therapist-patient communication; Communication with the patient - general principles; Kinetotherapeutic intervention – Principles; Training of communication skills; Conflicts and their management; Counseling patients with anxiety, depression, personality disorders; Addressing stroke patients, cognitive impairment and aphasia; The importance of personal quality in the therapeutic relationship; Effective communication assessment tools; Active listening, role playing; Conflict management - case studies; Characteristics of patients with anxiety disorders; Characteristics of patients with cognitive impairment; Psychological response to injury of sports trauma patient.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Internship in special education centers	Stag03	3	-	-	3	

**Course description (Syllabus):** The contents of discipline are able to form specialists able to understand the mechanisms of social intervention, identify issues, and best practices in social assistance, have the ability to work in multidisciplinary teams for social projects, communicate adequately in groups, organizations and communities.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Software specializing in recovery and social care centers	Soft03	2	1	1	-	-

**Course description (Syllabus):** The role of the software in medical recovery. Features, parameters, applications of software in different ailments. Types of software and apparatus for medical recovery.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Equipment, apparatuses and installations used in kinesitherapy / Equipments and devices for determination of exercise capacity	EAIK03/ Eap03	2	1	1	-	-

**Course description (Syllabus):** General and specific concepts regarding the terminology used in the discipline; The role and effectiveness of objects, materials and tools in physical therapy, using various objects and tools in kinetic therapy, safety and protection measures; Fitness equipment used in physical therapy (walking and running treadmill, bicycle, Multifunctional devices, fitness ball (Gym ball), Bossu ball, Step360 Pro Concept, stretch fabrics (rope, tape, extensor); Mechanical therapy - Conceptual role, relevance, efficiency and classification. (Pulleys therapy, Suspension therapy, mechanical passive mobilizations, mechanical tractions / elongations, pneumatic instruments); Equipments, installations, objects and devices in the education and rehabilitation of posture, balance and walking (device frame with parallel bars, crutches, orthoses, canes, support bracket for walking, modular system with gears and parallel, ergometric bicycle, treadmill, discs and balance boards, balls); Chamber of sensory stimulation. Importance, specific components, arrangement and advantages of the sensory stimulation room; Equipment used in kinetic therapy research (Posture device, strength platforms, simulation training devices).

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
English /Spanish language	LbE03/LbS04	2	1	1	-	-
	LbE03/LbS04	2	1	1	-	-

**Course description (Syllabus):** The English Verb System – Practice; Present (simple & continuous, perfect simple & continuous) – Practice; Past (simple & continuous, perfect simple & continuous) – Practice; Future (simple & continuous, perfect simple & continuous). Future-in-the-Past (simple & continuous, perfect simple & continuous). Other ways of expressing the future (Present simple & continuous, be going to, be to, be about to) – Practice; Modals – Practice; The Noun – Practice; The Adjective – Practice

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Elements of physiotherapy	EFiz04	3	2	1	-	-

**Course description (Syllabus):** Notions of electrotherapy; Notions of aqua- therapy; Notion of thermotherapy; Notions of phototherapy; Notions of the ultrasonic therapy; Concepts of magnetic therapy

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Measurement and evaluation in kinetotherapy	MEv04	5	2	2	-	-

**Course description (Syllabus):** Conceptual restraints of evaluation, evaluation of the neuro- myo - arthrokinetic apparatus afflictions. Benchmarks of the development concept, characteristics of the human being's evolution; Theoretical aspects regarding the importance and the role of evaluating the growth and physical development through subjective and objective methods: the general segmentary somatoscopy examination, the instrumental somatoscopy examination, somatometry; Theoretical aspects regarding the specific elements of evaluating the movement amplitude I and II: evaluating the articular amplitude and the articular balance of the spine; Data regarding the evaluation of muscular force. The subjective and objective muscular evaluation. Testing the muscular force; The characteristics of appreciating the balance disorders, the evaluation of resistance and ADL's; Theoretical consideration and data regarding the exploration of sensibility and reflexes; Data concerning the ongoing of the rehabilitation program, through tests and means specific to the functional evaluation, cardio respiratory and neuromuscular reactivity.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical therapy in rheumatology	KReum04	5	2	2	-	-

**Course description (Syllabus):** Rheumatoid arthritis; Spondyl-arthropathies seronegative - Ankylosing spondylitis; Osteoarthritis; osteoporosis; Rheumatic; Reflex sympathetic dystrophy

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical therapy in sensory physical deficiencies	KDF04	5	2	2	-	-

**Course description (Syllabus):** Physical exercise - specific means of physical therapy. Static and dynamic exercises. Control - coordination - balance in the context of physical therapy. Physical deficiencies of the head and neck. Physical deficiencies of the spine: kyphosis, lordosis, kypholordosis, scoliosis, kyphoscoliosis. Chest physical deficiencies. Physical limb deficiencies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Massage and complementary techniques	Mas05	7	2	2	2	-

**Course description (Syllabus):** Massage: General remarks, areas involved in massage, massage rules for the application. Main technical processes and effects of massage. Technical and side effects of massage procedures. Partial massage, massage trunk, lower limbs, upper head. Reflex massage - basics.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Internship in special education units	Stag04	2	-	-	2	-

**Course description (Syllabus):** The contents of discipline are able to form specialists able to understand the mechanisms of social intervention, identify issues, and best practices in social assistance, have the ability to work in multidisciplinary teams for social projects, communicate adequately in groups, organizations and communities .

### 3<sup>rd</sup>Year

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical therapy in orthopedic diseases - trauma applications in sports	Kortp05	4	1	2	-	-

**Course description (Syllabus):** Recovery of posttraumatic knee; Recovery arthrosis; Recovery traumatic shoulder; Manisc recovery lesions; Recovery traumatic lesions of the spine; Recovery traumatic injuries of the hand and foot

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical therapy in pediatrics	Kped05	4	1	2	-	-

**Course description (Syllabus):** General musculoskeletal physical disabilities; Reduced physical growth and development of the body; Segmentation of the musculoskeletal physical disabilities; Evaluation of Analytical; Evaluating the amplitude of movement; Muscle Evaluation; Posture and body alignment; Educating and re-education methodical physical deficiencies

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical therapy in diseases of cardiorespiratory	Kresp05	4	1	2	-	-

**Course description (Syllabus):** Cardiovascular diseases - general characteristics; Indications and contraindications recovery cardio - vascular; Preventing the recovery of cardio - vascular; Recovering patients with CAD; Recovering patients with hypertension; Recovering patients with IC; Recovering patients with arrhythmias; Recovering patients with implants; Peculiarities of recovery in the elderly and young people; Recovering patients with AMI; Recovering chronic respiratory diseases

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Electrotherapy / Sensory-motor therapy	El/Tsm05	3	1	-	2	-

**Course description (Syllabus):** Notions of electrotherapy; Notions of aqua- therapy; Notion of thermotherapy; Notions of phototherapy; Notions of the ultrasonic therapy; Concepts of magnetic therapy

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Ludo therapy / adapted motor activities	Ld/AMA05	3	1	-	2	-

**Course description (Syllabus):** Ludotherapy – characteristics, definitions, concepts; Games for developing sensitivity; Psychomotor training and development – oculo-motor coordination games, perceptually motor games; Knowledge and operation with familiar elements from the environment; Stimulating and developing psycho-individual capacities to adapt to the environment – games for developing auditory, visual, tactile representations, games for stimulating thinking, comparison games; Formation and development of general motive behaviors; Formation of independent behaviors for social integration – games for stimulating and developing communication, symbolic games.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Aqua gym / Prevention and recovery in competitive sports therapist	Aq/PrRek05	3	1	-	2	-

**Course description (Syllabus):** Motor activity, human motility; Motor activity – Elements of content; Motor learning; Motor activity – learning and training tools; Motor activities – basic motor qualities; Motor programming and planning activities; Evaluation to the motor activity; Fitness; body expression

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Internship in social assistance centers	Stag05	4	-	-	4	-

**Course description (Syllabus):** The contents of discipline are able to form specialists able to understand the mechanisms of social intervention, identify issues, and best practices in social assistance, have the ability to work in multidisciplinary teams for social projects, communicate adequately in groups, organizations and communities .

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Traineeship and development of the dissertation	ELL05	5	-	-	5	-

**Course description (Syllabus):** Composition of scientific research on graduate profile.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Kinotherapy in neurological disorders	KNeu06	3	1	2	-	-

**Course description (Syllabus):** The pathology of the brain, spinal cord and peripheral nervous system pathology muscle tributary nervous system. Ischemic and haemorrhagic stroke, degenerative and inflammatory diseases of the central and peripheral nervous system, tumours processes, epilepsy, brain trauma and spinal cord.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Patient handling techniques	TMB06	6	1	2	2	-

**Course description (Syllabus):** Manoeuvres, posture and means to achieve them; Types of posture according to the diagnosis; Neurological patient posture; The wheelchair: types; posture assessment in cardiovascular and pulmonary diseases; Transferring patients; Standing up; Assisting means for walking; Re-education assistant walking by means of: walking between parallel bars with fixed or mobile frame with crutches or cane with crutches on the steps.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Physical Therapy in geriatrics	KGG06	3	1	2	-	-

**Course description (Syllabus):** Recovery and physical therapy in Parkinson's disease; Pain relief; General issues about aging; Aging criteria; The stroke; osteoporosis; Recovery osteoarthritis and coxarthrosis

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Methods and techniques of motor reeducation	MTehMNO6	3	1	2	-	-

**Course description (Syllabus):** Training and correct attitude correction. Detection and sorting physical deficiencies in school; Whole-body physical impairments; Physical deficiencies of the head and neck; Elements of Anatomy and Functional anatomy of the spine. Basics spine morphology of recovery; Physical deficiencies of the spine: kyphosis, lordosis, cifo-lordoza; Physical deficiencies of the spine: scoliosis, kyphoscoliosis. Complex physical impairments; Chest physical deficiencies. Physical deficiencies of the arm; Physical deficiencies of the foot. Evaluation walking. Pathological walk.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Management and Marketing in Physical Therapy	MMk06	3	2	1	-	-

**Course description (Syllabus):** Management and evolution of the management concept. Organization and organizations in the management of sports activities. Sports organisations, forms of social organization. Characteristics of the sports organization manager. Human resources management in physical education and sports activity. Management of financial resources in sports activity. Marketing in sports activities.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Methods and Techniques of Muscle Toning / Aerobic Step	MThTM/ SAer 06	5	2	2	-	-

**Course description (Syllabus):** Motor activity, human motility; Motor activity - Elements of content; Motor learning; Motor activity - learning and training tools; Motor activities - basic motor qualities; Motor programming and planning activities; Evaluation to the motor activity; Fitness; body expression

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Occupational Therapy	Toc06	7	2	2	2	-

**Course description (Syllabus):** Educational integration of children with mental deficiencies medium and those with severe disabilities; Targeted therapies and clearing and educational complex and integrated therapy; Fundamentals of special education: the principle of ensuring unity of instruction, education, compensation, recovery and / or reeducation; The formation of personal autonomy, socialization, occupational therapy, cognitive stimulation and Ludo therapy.